

Amendments to the Drawings

Kindly amend Figures 1A and 1B by adding reference number –10– as indicated in red on the attached sheets.

Kindly amend Figure 3C by including hatchmarks and reference number –57– as illustrated in red on the attached sheet.

All of the amended drawing sheets enclosed herewith are labeled with the phrase “REPLACEMENT SHEET” and the sheets showing changes in red are referred to as “Marked-Up”.

REMARKS

Applicants respectfully request reconsideration of the present application in view of the above amendments and the following remarks.

Claims 1-17 have been amended.

Claims 1-17 are pending for further prosecution on the merits.

I. SUMMARY OF OUTSTANDING OFFICE ACTION

The Examiner objected to the drawings under 37 C.F.R. 1.84(p)(5), since they do not include reference numeral "10" which is mentioned in the description.

The Examiner objected to the drawings under 37 C.F.R. §1.83(a) because the hatch marks mentioned in Paragraph 48 of the specification and claimed in Claim 11 are not shown.

The Examiner objected to the specification because he believes that the title is not descriptive of the invention to which the claims are directed.

The Examiner rejected Claims 1-4, 6-8, 10 and 13-17 under 35 U.S.C. §102(b), as being anticipated by U.S. Pat. No. 5,233,185 to Whitaker.

The Examiner rejected Claim 5 under 35 U.S.C. §103(a), as being unpatentable over U.S. Pat. No. 5,233,185 to Whitaker in view of U.S. Pat. No. 6,176,246 to Lin et al.

The Examiner rejected Claims 9 and 12 under 35 U.S.C. §103(a), as being unpatentable over U.S. Pat. No. 5,233,185 to Whitaker.

The Examiner rejected Claim 11 under 35 U.S.C. §103(a) as being unpatentable over Whitaker in view of U.S. Pat. No. 6,203,071 to Kingsford et al.

II. NON-ART MATTERS

Applicants have enclosed new drawing sheets for Figures 1A and 1B. Reference numeral 10 has been added in red on both of these figures. This amendment to Figures 1A and 1B is being made to address the Examiner's objection in Paragraph 1 of the outstanding Office Action.

Applicants have enclosed a new drawing sheet for Figure 3C. Hatch marks have been placed along the tubes as disclosed in Applicants' specification at Paragraph 48 of Publication No. US2005/0001573 A1 and the hatchmarks are identified by reference numeral 57 which has also been included in red. This amendment to Figure 3C is being made to address the Examiner's objection in Paragraph 2 of the outstanding Office Action.

The amendments to the drawings are fully supported by the specification and do not contain new matter. Applicants respectfully request that the Examiner approve the amendments to the aforementioned drawings.

New drawing sheets for Figures 1A, 1B and 3C without the red ink are also enclosed herewith.

Applicants have amended the title and believes that it is descriptive of the invention. Applicants have amended Claims 1-17 in order to conform to the terminology used in the amended title. No amendments to the claims were made because of an art rejection.

III. TRAVERSAL OF REJECTIONS BASED ON ART**1. Rejections Based on Whitaker Alone**

A rejection under 35 U.S.C. 102(b) requires that each and every element of the claimed

invention be taught by the cited reference. Further, since a U.S. patent must describe and enable an invention to one skilled in the art, an anticipating patent by definition must place the claimed invention into the public domain.

Whitaker (U.S. Pat. No. 5,233,185) does not disclose a telescoping leg to hold the transmitter and receiver. Applicants' two independent Claims, 1 and 14, both expressly recite the telescoping leg feature.

The Examiner states that Figure 4 of Whitaker anticipates Applicants' claimed telescoping leg. Whitaker does mention at column 4, lines 20-39 a "retractable spring device 55" and purports to show a drawing of the spring device in Figure 4. However, Whitaker fails to provide even a basic description of his spring device, spends a portion of the description explaining the disadvantages of such a spring device, and illustrates in Figure 4 only a minimal drawing in which only a spring is recognizable.

By making §102 rejection, the Examiner concluded in the Office Action that Whitaker's spring device is identical to Applicants' telescoping leg. Applicants respectfully submit there is no basis for the Examiner to make such a conclusion after reading the minimal statements in Whitaker regarding a spring device. Applicants can think of a number of "spring devices" including scales, mouse traps, and watches – but none of these "spring devices" will anticipate Applicants' invention.

Under §102, an anticipatory reference must disclose each and every element of Applicants' claimed invention. Whitaker clearly fails to disclose Applicants' telescoping leg assemblies; therefore, Whitaker cannot anticipate Applicants' claimed invention. Moreover,

Whitaker does not teach or suggest Applicants' invention and, by itself, cannot make obvious Applicants' claimed invention.

In addition, since Whitaker is a U.S. patent, it must describe and enable the invention to one skilled in the art and, if it anticipates the subject invention it must place the subject invention into the public domain. In other words, can a person of average skill in the art, after reading column 4, lines 20-39 of Whitaker's patent be able to build Applicants' claimed invention? The answer is a resounding, "No!" Clearly, Whitaker does not disclose, teach, or suggest telescoping legs as claimed by Applicants in independent Claims 1 and 14.

Since Whitaker has very little discussion regarding a "spring device," and does not even mention telescoping leg assemblies, it cannot place Applicants' invention into the public domain and, therefore, cannot anticipate Applicants' invention (or, for that matter, make obvious Applicants' claimed invention).

Applicants' independent Claims 1 and 14, along with Claims 2-13 and 15-17 which depend directly or indirectly from the independent claims, are not anticipated or made obvious by the Whitaker patent. Unless the Examiner can point out by naming a specific column and line numbers in Whitaker that explains how a "spring device" discloses Applicants' telescoping leg assembly, the Examiner must withdraw his rejection under §102 based on Whitaker.

Even if, *arguendo*, Whitaker does disclose each and every element of Applicants' basic telescoping leg assembly as claimed in Applicants' independent claims, Whitaker does not disclose any structural feature which compensates for overtravel of the door as claimed by Applicants in Claim 6 (and Claims 7 and 8 which depend directly from Claim 6).

The Examiner states in the Office Action that “as understood, since the transmitter and receivers are on the leading edge of the door, they are held at an appropriate distance to accommodate the over-travel of the door.” Applicants’ attorney is at a loss at how the Examiner could make such a statement. If Whitaker’s spring device holds the transmitter/receiver one inch (or two inches, etc.) in front of the leading edge of the door, it is highly unlikely for the Whitaker device to be able to compensate for overtravel.

Whitaker makes no mention whatsoever of overtravel, or of placing the transmitter receiver any specific distance in front of the leading edge of the door. The Examiner, after reading Applicants’ disclosure, has used impermissible hindsight to read features into Whitaker that are clearly not present. The Examiner must withdraw his rejection of Claims 6-8 under §102 because Whitaker does not anticipate nor does it make obvious Applicants’ claimed invention.

In addition, Whitaker does not disclose or teach how the length of the spring device can be adjusted. The Examiner states that “as understood, the length of the legs “can” be adjusted”; again, this is statement is absolutely wrong and there is not a shred of support in Whitaker for the Examiner to make such a statement.

The entire disclosure of a spring device is set forth in Whitaker at column 4, lines 20-39, and a portion is spent describing the disadvantages of such a device.

The telescoping leg design is an important feature of the present invention and has at least two distinct advantages over the art cited by the Examiner. First, the telescoping leg design allows the Applicants to quickly change the length of the leg. By keeping standardized tubes or

leg segments, the legs of Applicants' invention may be shortened or lengthened relatively quickly without having to replace the entire leg assemblies – segments may be added or removed as needed. This is a consideration especially in commercial settings where the height of the objects passing through/under the door may change over time or from one project to the next.

Second, the telescoping design of the legs provide structural stability when a relatively long leg is required. As indicated throughout Applicants' description (e.g., at, inter alia, pg. 2, lines 21-27; pg. 8, lines 11-12, etc.), the legs must be long enough to compensate for the overtravel of the door. Once the optical beam is broken, a signal is sent by the receiver to the control circuitry, and the control circuitry in turn either turns off the motor (stopping the movement of the door) or reverses the current to the motor thereby reversing the direction of travel of the door. (It should be noted that a person skilled in the art of automatic garage door openers would understand that the motor does not have to be bi-directional in order to reverse the direction of travel of the door; a clutch, transmission or other gear/belt device can change the direction of travel of the door without the motor having to change the direction it rotates.) However, in the real world, the door never stops immediately nor can it immediately reverse direction without negative consequences (e.g., hammering). The inertia of the door keeps it moving in the downward/closing direction for a few seconds before the door can stop or reverse direction. This effect is called "overtravel". The overtravel effect is especially a factor in larger doors used to allow entry of tractor- trailers (in large garages), cranes, air planes (in airplane hangars), satellites (in testing chambers), etc.

As you can appreciate, if a child, or an expensive airplane or satellite is under a closing

door and breaks the beam, the consequences can be dire if the door keeps traveling and engages the head of the child or the fuselage of the airplane. This scenario can happen even after the beam has been broken and a signal has been sent to turn off the door's motor because the door cannot stop immediately. None of the art cited by the Examiner (including Whitaker) takes into account the overtravel of the door.

The Applicants' telescoping leg structure alone distinguishes Applicants' claimed invention over Whitaker and the art cited by the Examiner. Accordingly, the Examiner's rejection under 35 U.S.C. §102(b) based on Whitaker must be withdrawn since Applicants' claims 1-17 are not anticipated or made obvious by the Whitaker disclosure.

Nowhere does Whitaker disclose, or suggest mounting the receiver and transmitter sufficiently away from the door to account for the door's overtravel. Further, the art of record including Whitaker does not disclose or teach an object detection system that gth of the leg assemblies. Therefore, Whitaker cannot anticipate or make obvious Applicants' claims 6, 7, and/or 8.

2. Traversal of Rejections Based on Whitaker in view of Lin et al.

Pursuant to MPEP §2141.01(a), in order to rely on a reference under 35 U.S.C. 103(a) as the basis for rejection of Applicants' invention, the reference must be analogous prior art, i.e., it must be in the field of Applicants' endeavor.

In the case *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ 2d 1443, 1445 (Fed. Cir. 1992), the court held that a claimed improvement in a hose clamp which differed from the prior art in the

presence of a pre-assembly hook was not in the field of endeavor of a reference which disclosed a hook and eye fastener for use in garments. The PTO's Appeal Board reasoned that all hooking problems are analogous. The Federal Circuit court disagreed and ruled that the reference was not reasonably pertinent to the particular problem because it had not been shown that a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would reasonably be expected or motivated to look to fasteners for garments. As stated at column 1, lines 28-30 of U.S. Pat. No. 6,176,246, a primary goal of the Lin et al. invention was to develop an umbrella with a shortened length.

Applicants respectfully submit that Lin et al. discloses an improved personal umbrella and the invention is classified in the field of umbrellas.

In the present application, a person of ordinary skill in the art, seeking to solve a problem related to electrically- operated or automated garage door openers, would not be reasonably expected or motivated to look to the field of manually-operated umbrellas to solve his/her problem. Therefore, the Examiner's combination of Whitaker and Lin et al. is improper and must be withdrawn.

Pursuant to MPEP §.2143.01, the prior art must suggest the desirability of the claimed invention. As indicated above, an object of the Lin et al. invention was to make a smaller (i.e., shorter) umbrella. Applicants' invention uses two telescoping assemblies that operate in tandem to keep the receiver in alignment with the transmitter. Except in one embodiment as recited in Claim 6, there is no real length requirements. The only length consideration made in Applicants' disclosure was in the embodiments for ensuring that the leg assemblies are sufficiently long to

keep the transmitter and receiver ahead of the leading edge of the door in order to compensate for overtravel.

As stated previously, Whitaker does not disclose or teach a telescoping leg assembly let alone a three-tube telescoping leg assembly where each leg telescopes into an adjacent leg as claimed by Applicant in Claim 5. Lin et al. discloses an umbrella with a sophisticated extension/retraction means that must simultaneously collapse or expand the ribs that hold the rain-deflecting material. Nowhere in either Whitaker or Lin et al. does it teach or suggest Applicants' claimed telescoping features. For the above reasons, the combination of Whitaker in view of Lin et al. cannot anticipate or make obvious the Applicants' claimed invention and, in particular, this art combination cannot make obvious Applicants' Claim 5.

3. Traversal of Rejection Under 35 U.S.C. §103(a) in View of Whitaker

Pursuant to MPEP §2142, in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As explained previously, Whitaker's Figure 4 discloses that the lens can be mounted on a "retractable spring device." However, Whitaker does not disclose what a retractable spring device is or how it operates. If Whitaker does not disclose or enable a spring device, how can it teach or suggest all of the claim limitations of Applicant's invention and, specifically, a telescoping leg assembly?

Applicants explain in great detail how their telescoping leg assemblies are built and how they operate. Applicants' Claim 9 recites that the tubes have a square cross-section. Whitaker does not mention telescoping leg assemblies or even the word "tubes." It is impossible to establish a *prime facie* case of obviousness when Whitaker does not mention even a generic term of Applicants' invention let alone something as specific as tube having a square cross-section.

Whitaker provides virtually no explanation of a spring device let alone a telescoping leg assemblies. Whitaker's patent would not be enabling for a "spring device". Whitaker does not call out any elements of the spring device, name any parts, explain how the parts interact, in short, there is almost no disclosure whatsoever. Whitaker can not and does not disclose Applicants' telescoping assemblies.

Similarly, Whitaker makes no statements regarding how spring device is attached to the door. Applicants clearly point out tabs used to attach their leg assemblies to the door. Therefore, Whitaker cannot teach or suggest all of the elements recited in Applicants' Claim 9 and/or Claim 12.

Moreover, Whitaker does not disclose or suggest Applicants' base invention of a telescoping leg as recited in Claim 1. Therefore, Whitaker cannot anticipate Applicants' Claims 9 and 12 which depend from Claim 1 and incorporate all of the structural elements of Claim 1.

4. Traversal of the Rejection Under §103(a) Based on Whitaker in View of Kingsford et al.

As stated above, under MPEP §2141.01(a), in order to rely on a reference under 35 U.S.C. 103(a) as the basis for rejection of an Applicants' invention, the reference must be analogous prior art, i.e., it must be in the field of Applicants' endeavor.

Kingsford et al. discloses a new joint for pipes and is in the field of plumbing. In the present application, a person of ordinary skill in the art, seeking to solve a problem related to electrically- operated or automated garage door openers, would not be reasonably expected or motivated to look to the field of pipes or plumbing to solve his/her problem. Therefore, the Examiner's combination of Whitaker and Kingsford et al. is improper and the rejection under §103(a) based on Whitaker and Kingsford et al. must be withdrawn.

In addition, pursuant to MPEP §2142, in order to establish a *prima facie* case of obviousness, the prior art references when combined must teach or suggest all the claim limitations. Applicants' Claim 11 depends from Claim 1; therefore, Claim 11 includes all of the structural features recited in Claim 1 including the telescopic leg assemblies.

As discussed above, Whitaker fails to disclose, teach or suggest Applicants' telescoping leg assemblies. Kingsford et al. does not even address the issue of telescopic leg assemblies. Accordingly, even if Kingsford et al. was in the same field of invention as Applicants' invention,

the combination of Whitaker and Kingsford et al. still does not teach or suggest all of the claim limitations of Applicants' Claim 11 (and because of its dependency of Claim 1).

Finally, there is no motivation in either Whitaker or Kingsford et al. to make the combination. Therefore, the combination of Whitaker and Kingsford et al. cannot anticipate or make obvious Applicants' independent Claims 1 and 14 or any claim that depends directly or indirectly from Claims 1 and 14 – such as Claim 11.

Applicants' attorney is confused as to the Examiner's use of the phrase "as understood," "retractable spring device" and Whitaker only mentions a provides not one scintile of information or description regarding telescoping leg assemblies.

Under §§102 and 103, the reference or references must disclose each and every element in order to form the basis of an anticipatory rejection or an obviousness rejection respectively. Unless the Examiner can point out with specificity in Whitaker (i.e., column and line number) where structural features such as telescoping tubes, means for compensation, for overtravel, square tubes etc., Whitaker cannot be used to reject Applicants' claimed invention.

III. CONCLUSION

Applicant has made claim amendments to clarify certain elements, address formalities raised by the Examiner and to correct typographical errors. No claim amendment herein was made as a result of art cited in this case.

Whitaker simply does not disclose, teach or suggest a telescoping leg nor does Whitaker disclose, teach or suggest a means for compensating for the overtravel of the door. Moreover,

Whitaker, being a U.S. patent, does not place a telescoping leg for use in an obstruction detection assembly into the public domain. Since Whitaker fails to show even the slightest details of Applicants' invention and since Whitaker does not place Applicants invention into the public domain, Whitaker cannot anticipate or make obvious Applicants' Claims 1-17 and the Examiner's rejections under §102 and §103 based on Whitaker must be withdrawn.

The art cited by the Examiner, either individually or in combination, fails to disclose, teach and/or suggest Applicants' claimed invention. Accordingly, the Examiner must withdraw all rejections based on Whitaker, Lin et al. and Kingsford et al.

Applicants believe that they have addressed all of the issues raised by the Examiner in the outstanding Office Action and that the application is now in condition for allowance.

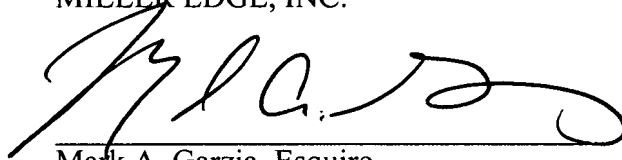
Should the Examiner have any questions regarding this application, he is invited to telephone the undersigned in order to expedite the examination procedure.

A Transmittal Letter that includes the Petition for Extension of Time and a self-addressed, postage pre-paid postcard for the PTO to acknowledge receipt of this communication are enclosed.

In view of the above amendments and remarks, Applicants respectfully request reconsideration of the present application and the early issuance of a Notice of Allowance for Claims 1-17.

Respectfully submitted,

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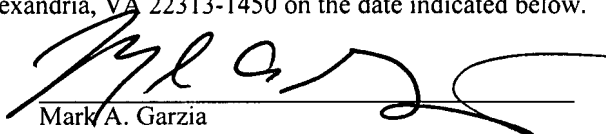
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CERTIFICATE OF MAILING

I hereby certify that this communication, along with any paper or fee indicated as being enclosed, is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

10 JULY 2007
Date


Mark A. Garzia